

E. R. Sykes: Eulimidae from Guernsey and other localities, including *E. anceps*, Marshall.

E. A. Smith: Sinistral and other forms of *Helix nemoralis* from Bundoran, Donegal.

E. R. Sykes: Specimens in illustration of his paper.

NOTES.

NOTE ON THE HISTOLOGY OF MOLLUSCAN AND OTHER OLFACTORY NERVE CENTRES. (*Read 11th April, 1902.*)—The late Mr. Martin F. Woodward, in his valuable account of the anatomy of *Pleurotomaria Beyrichii*, Hilg. (*Quart. Journ. Micro. Sci.*, vol. xlv, p. 215), draws attention (p. 226), when dealing with the minute structure of the branchial ganglia, to a number of "curious dim bodies" lying near the periphery of the central mass of the ganglion, "which at first sight suggest large ganglionic cells." That such is not their real nature he infers from the entire absence of nuclei in them, as well as from their want of sharpness of outline. He finally concludes that "they are in reality bundles of fibre, rather more closely packed than usual."

It is interesting as a commentary upon this observation by Woodward to recall that similar local condensations of the neuropile or glomeruli, as they are usually termed, occur in many groups of the animal kingdom, and always apparently, as in this case, in nerve centres that innervate sense organs of a more or less undoubted olfactory nature. The following examples may be cited: the olfactory bulbs of all Vertebrates; the antennary lobes of Insects and Myriopods; the globuli of Crustacea (the centres for the innervation of the antennules); and, among Polychæte Worms, a lobe of the brain of *Aphrodite* that probably is related to the nuchal region.

It will be observed that in all these instances the sense organs innervated from these glomerulated centres are, at any rate probably, olfactory; and the same is true for *Pleurotomaria*, in which the osphradium is directly innervated by this glomerulated branchial ganglion.

What the physiological meaning of this very widespread association of a glomerulated neuropile with the sense of smell may be is not yet explained, but the facts as they stand are of no little interest.

R. H. BURNE.

MARINE SHELLS COLLECTED AT ADEN BY COMMANDER E. R. SHOPLAND.
—The following species were accidentally omitted from the list published in the last number of these "Proceedings" (p. 175), viz.:—

Leptoconchus serratus, Desh.

Cypræa annulus, L.

" *Arabica*, L.

" *cameleopardalis*, Perry.

" *carneola*, L.

" *caurica*, L.

" *cribraria*, L.